

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A blood pressure and pulse rate system for deriving the blood pressure and pulse of a subject that is in communication with an interface member, said system comprising:

an inflated interface member maintained at a substantially constant pressure, wherein said interface member is configured to function when in indirect contact with the subject's body; and

a sensor module in communication with said interface member, said sensor module for detecting a pulse wave form and pulse rate; and a processor module that analyzes the pulse wave form and pulse rate signal for deriving variants of blood pressure.

2. (Previously Presented) The system of claim 1, wherein said variants of blood pressure includes at least one of pulse pressure, systolic pressure, diastolic pressure, pulse width, pulse time difference, double peak difference, and depth of dicrotic notch.

3. (Original) The system of claim 1, further comprising: an output module for receiving said variants of blood pressure.

4. (Previously Presented) The system of claim 3, wherein said output module comprises at least one of display, alarm, memory storage, communication device, printer, buzzer, PDA, lap top computer, computer, audio and visual alarm, and light.

5. (Previously Presented) The system of claim 1, wherein said interface member is also configured to function when in direct contact with the subject's body.

6. (Original) The system of claim 1, wherein said sensor module is directly or indirectly coupled to the interface member.
7. (Original) The system of claim 1, wherein said sensor module and processor module are in wireless communication.
8. (Previously Presented) The system of claim 7, wherein said wireless communication comprises at least one of RF link, an infrared, cellular phone link, optical and electromagnetic.
9. (Original) The system of claim 1, wherein said sensor module and processor module are in a hard wired communication.
10. (Previously Presented) The system of claim 9, wherein said hard wired communication comprises at least one of electronic, integrated circuit, electromagnetic, wire, cable, fiber optics, a phone line, twisted pair, and coaxial.
11. (Original) The system of claim 1, further comprising archival storage module.
12. (Previously Presented) The system of claim 11, wherein said archival storage module stores at least one of longitudinal analysis and pattern recognition for diagnostic and other purposes.
13. (Previously Presented) The system of claim 12, wherein said processor module performs at least one of longitudinal analysis and pattern recognition analysis.
14. (Previously Presented) The system of claim 12, further comprising: a second processor module, said second processor module analyzes the variants of blood pressure, longitudinal analysis, and pattern recognition.
15. (Previously Presented) The system of claim 1, wherein the subject is a human or animal.

16. (Previously Presented) The system of claim 1, wherein at least a portion of the subject is an animate or inanimate object.

17. (Previously Presented) The system of claim 1, where said interface member is at least one of platform, scale, chair, bath mat, mat, bed, shoe, slipper, door knob, handle, and sandal.

18. (Previously Presented) The system of claim 1, wherein said sensor module comprises at least one of piezoelectric device, fiber optic device, differential transformer, and pressure determining device providing sufficient resolution to transduce the naturally occurring changes in physiology related to the subject of interest cardiac event.

19. (Original) The system of claim 18, wherein said sensor module is directly or indirectly coupled to the subject.

20. (Original) The system of claim 1, further comprising a control module for controlling said sensor module and processor module.

21. (Original) The system of claim 1, wherein said sensor module is directly or indirectly coupled to the subject.

22. (Previously Presented) A method for deriving the blood pressure and pulse of a subject that is in communication with an interface member, said method comprising:

detecting a pulse wave form and pulse rate; and

analyzing the pulse wave form and pulse rate signal for deriving variants of blood pressure;

wherein the interface member is inflated and maintained at a substantially constant pressure and is configured to function when in indirect contact with the subject's body.

23. (Previously Presented) The method of claim 22, wherein said variants of blood pressure includes at least one of pulse pressure, systolic pressure, diastolic pressure, pulse width, pulse time difference, double peak difference, and depth of dicrotic notch.
24. (Original) The method of claim 22, further comprising: outputting the variants of blood pressure.
25. (Original) The method of claim 24, wherein said outputting is provided by an output module.
26. (Previously Presented) The method of claim 25, wherein said output module comprises at least one of display, alarm, memory storage, communication device, printer, buzzer, PDA, laptop computer, computer, audio or visual alarm, and light.
27. (Original) The method of claim 22, further comprising: storing archival information or data.
28. (Original) The method of claim 27, wherein the storing of archival information or data is provided by an archival storage module that stores at least one of longitudinal analysis and/or pattern recognition for diagnostic and other purposes.
29. (Previously Presented) The method of claim 28, further comprises: performing at least one of longitudinal analysis and pattern recognition analysis.
30. (Previously Presented) The method of claim 22, wherein the subject is a human or animal.
31. (Previously Presented) The method of claim 22, wherein at least a portion of the subject is an animate or inanimate object.
32. (Previously Presented) A computer program product comprising computer usable medium having computer logic for enabling at least one processor in a computer system to derive the

blood pressure and pulse of a subject that is in communication with an interface member, said computer logic comprising;

detecting a pulse wave form and pulse rate; and

analyzing the pulse wave form and pulse rate signal for deriving variants of blood pressure;

wherein the interface member is inflated and maintained at a substantially constant pressure and is configured to function when in indirect contact with the subject's body.

33. (Previously Presented) The method of claim 22, wherein the interface member is also configured to function when in direct contact with the subject's body.

34. (Previously Presented) The computer logic of claim 32, wherein the interface member is also configured to function when in direct contact with the subject's body.